

# Coordinated Transportation Investment Plan Draft Recommended Transportation Improvement Concepts

Prepared for

Northgate Stakeholder Group

CTIP Subcommittee

Prepared by

Mirai Transportation Planning and Engineering and Seattle Department of Transportation

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# **Prioritization Process**

CTIP employed the following steps to prioritize the transportation improvement concepts:

#### 1. <u>Develop CTIP goals</u>

- Move people safely and efficiently
- Reduce drive alone travel
- Protect the residential neighborhoods
- Support economic and housing development

### 2. Assign Each Improvement Concept to Particular Goal

#### 3. Score Improvements using Evaluation Criteria

<u>Not Scored</u>: Improvements already programmed for implementation or elements of SDOT ongoing operations; transit service improvements that require further SDOT/Metro negotiation; Transportation Management Association whose cost structure requires further planning beyond the CTIP study scope

<u>Cross-Freeway Connection</u> is addressed separately due to very high cost and the necessity of involving multiple institutional and community partners to achieve political consensus and secure necessary funding.

#### 4. Establish Preliminary Implementation Timeframes

Near-Term (0-6 years, longer if phasing required) Mid-Term (7-15 years) Long-Term (15-25 years) Not Recommended

#### 5. Apply Final Screening Criteria

The following issues were considered to assign the improvement concepts to the preliminary implementation timeframes:

**Policy Direction:** Advancement of each CTIP Goal, City Comprehensive Plan SDOT Transportation Strategic Plan, Northgate Area Comprehensive Plan, Mayoral Initiative and Council Ordinances

**Scores**: Evaluation of benefits and possible drawbacks

**Time Sensitivity:** Improvements that will address near-term emerging demand such as "failing intersections, ongoing safety problems, new public/private development

**Opportunity**: Such as potential partners and funding availability

# **Summary of Recommended Transportation Improvement Cost** by Priority

	CTIP Goal				
	•	Reduce Drive-		Protect Neighborhoods	Total
Near-Term	\$5,072,400	\$1,997,300	\$10,901,700	\$2,082,400	\$20,053,800
Mid-Term	\$8,166,900	\$998,600	\$2,300,300	See note below	\$11,465,800
Long-Term	\$8,574,700	\$981,800	\$0	See note below	\$9,556,500
Subtotal	\$21,814,000	\$3,977,700	\$13,202,000	\$2,082,400	\$41,076,100
	T				
Special Project I-5 Crossing					\$7-10,000,000
Total					\$48-51,000,000

*Note:* While all of the improvement concepts in the CTIP goal of "Protect Neighborhoods" are prioritized as Near-Term projects, it is anticipated that project phasing would be required. It should also be noted that there are additional pedestrian improvements recommended for arterial (residential) streets that meet the CTIP goal of "Move People Safely and Efficiently".

Finally, CTIP has evaluated transportation conditions on 20 local streets using special criteria designed especially for the purpose of helping to determine which, if any, of these streets may warrant future traffic calming measures and /or other improvements. For streets not at this time identified for improvements, CTIP recommends that SDOT utilize the CTIP baseline analysis to work with affected residents to monitor conditions and determine if future improvements become necessary. Undertake any future traffic volume and speed studies on these streets utilizing SDOT program funding. (See Appendix\_X\_ for list of streets and evaluation results).

# Recommendations

The following recommendations have been developed in consultation with SDOT and other City staff, outside transportation agencies and the Northgate Stakeholder Group CTIP Subcommittee:

- 1. Work with WSDOT, North Seattle Community College, King County/Metro, Sound Transit, Northgate Chamber of Commerce, businesses, and community leaders to implement the following special project:
  - F-1. Construct a pedestrian and bicycle bridge over I-5 to connect the community west of I-5 (and particularly North Seattle Community College) with the Metro Transit Center and future light rail station. The bridge should be located between NE 100<sup>th</sup> Street and NE 103<sup>rd</sup> Street. (Cost estimate: \$7 10 million)

## Background and reasons for the recommendation

The 1993 Northgate Area Comprehensive Plan called for a "grade separated pedestrian crossing "across Interstate 5 at NE 103<sup>rd</sup> Street to connect North Seattle Community College with the Northgate Transit Center and Mall.

The Draft 2006 Northgate Coordinated Transportation Investment Plan or CTIP will recommend an architecturally excellent pedestrian and bicycle overpass that crosses the freeway from the college to the south section of the future Sound Transit Link Light Rail Station.

There are certain infrastructure improvement projects that have the potential to transform a community for far into the future. The I-5 Crossing is such a project.

The construction of I-5 through the City of Seattle was a deep cut through communities like Northgate. Whole neighborhoods were split apart and separated by a river of poured concrete and ever-growing traffic. Northgate was no exception. An existing crossing of the freeway at NE 92<sup>nd</sup> Street is of little practical value to the largest group of pedestrians with the greatest potential demand for better access: students and faculty from North Seattle Community College who wish to use the transit center and who would be even more likely to cross I-5 once light rail arrives.

The City and the Washington State Department of Transportation (WSDOT) have long looked for opportunities to breech the gaps that were a consequence of freeway construction.

This crossing would encourage faculty and students to use transit thereby reducing Single Occupant Vehicle trips to the college and Urban Center. It would

help add to the mall's customer base and allow pedestrians coming from the west side of I-5 to access the new public and private developments envisioned for Northgate.

This project, once realized, can help throw a spotlight on the college and support its' plan to serve an educational and cultural beacon not only to the Northgate community of today but also attract the thousands of new residents and workers who will be a part of the revitalized Northgate Urban Center of 2030.

Expensive? Certainly, possibly \$10 million. But the benefits to so many are so clear that a dynamic partnership will emerge – bringing together the City of Seattle, WSDOT, North Seattle Community College, Northgate Mall, King County/Metro, Sound Transit, neighborhoods and others – that can make even such a large-scale project both visionary and doable.

WSDOT's I-5 Pavement Reconstruction Project, scheduled to begin construction in 2013 and continue for many years beyond, and would open a window of opportunity to leverage the political consensus, project planning, design engineering and community involvement needed to move forward. The CTIP begins this process.

- 2. Review and update the CTIP every 5-6 years.
- 3. Establish a voluntary development impact mitigation program that would streamline the development permit process for developers who participate and raise revenues for CTIP multi-modal improvement projects that manage off-site impacts of new development. (Site-specific improvements would continue to be determined through the existing permitting process.) Program development is funded in 2006.
- 4. Implement the following program improvements:
  - Work with King County Metro to improve transit services as described in J-1, J-2 and J-3 below.
  - Establish a Transportation Management Association (TMA) as described in J-4 below.
  - Revise Northgate SEPA polices to be consistent with the improvement concepts recommended in the CTIP. (REFERENCE WHERE IN CTIP)
  - Revise on-street parking controls and off-street parking requirements for the Northgate Urban Center to support City Comprehensive Plan and Transportation Strategic Plan goals. (REFERENCE WHERE IN CTIP)
- 5. Implement the 5<sup>th</sup> Avenue NE Streetscape Design Plan between NE 100<sup>rth</sup> Street and NE 112<sup>th</sup> Street. Phase I of this project from NE 105<sup>th</sup> Street to just south of Northgate Way will be constructed in 2006. Future phases would most likely be implemented in conjunction with private property redevelopment along the 5<sup>th</sup>

Avenue NE corridor. CTIP recommends urban design treatments for the pedestrian crossings at NE 100<sup>th</sup> Street and NE 103<sup>rd</sup> Street which are considered elements of the already programmed 3<sup>rd</sup> Avenue NE Extension Project.

6. Implement the following improvement concepts according to priority ranking described below ("Near-Term" improvements being the highest priority).

CTIP Goal: Move People Safely and Efficiently

### **Near-Term Improvements**

- F-7. Provide sidewalks on the north side of NE 100<sup>th</sup> Street from 1<sup>st</sup> Avenue NE to 3rd Avenue NE. (Cost estimate: \$158,000)
- A-6. Provide curbs, gutters and sidewalks on both sides of NE 125<sup>th</sup> Street from 5<sup>th</sup> Avenue NE to Roosevelt Way. (Cost estimate: \$861,000)
- A-5. Upgrade the intersection of NE 125<sup>th</sup> Street. / Roosevelt Way/ 10th Avenue NE and include the existing stop controlled 125<sup>th</sup> Street intersection as part of one new signal controlled intersection. (Cost estimate: \$2,558,000)
- D-1. Provide curbs, gutters and sidewalks on both sides of NE 92<sup>nd</sup> Street from 1st Avenue NE to 5th Avenue NE. (Cost estimate: \$550,000)
- H-1. Install pedestrian crossing improvements, consistent with SDOT guidelines and practices, such as curb extensions, signs and markings, in-pavement lighting and urban design features such as textured and colored surface treatments, on Roosevelt Way NE between NE 90<sup>th</sup> and 94<sup>th</sup> Streets through the Roosevelt neighborhood business district. (Cost estimate: \$99,000)
- G-4. Install pedestrian signal, consistent with SDOT signal warrant criteria at 15<sup>th</sup> Avenue NE and NE 120<sup>th</sup> Street. SDOT is currently evaluating the pedestrian need at this location and considering a pedestrian actuated signal. (Cost estimate: \$297,000)
- C-8. Work with businesses along Northgate Way to develop an access management plan that includes construction of a median and restriction of midblock left turns from Meridian Avenue N to the Corliss Ave N/I-5 Off Ramp. Consider where a break in the median may be allowed for access. Investigate feasibility of providing a business access street south of Northgate Way. (Cost estimate: \$218,000, which does *not* include cost of the business access street.)
- E-7. Work with the businesses along Northgate Way to develop an access management plan that includes construction of medians and restriction of midblock left turns from 5<sup>th</sup> Avenue NE to Roosevelt Way NE. Consider where

breaks in the medians may be allowed for access; or u-turns at intersections. (Cost estimate: \$81,000; cost of developing u-turn capacity is not included.)

C-12. Utilize the DPD Open Space/Pedestrian Plan for design treatments that enhance the pedestrian connection on Northgate Way under I-5 between Corliss Avenue N and 1<sup>st</sup> Avenue NE. A key CTIP recommendation is to place the sidewalks behind the I-5 bridge columns. This project should be implemented together with C-7, C-9 and C-10 as a package. (Cost estimate: \$253,000)

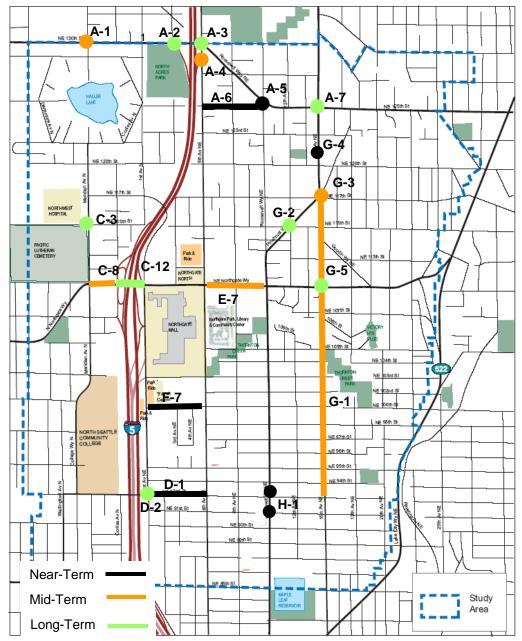
# Mid-Term Improvements

- A-1. Add left turn pockets on all approaches at the N 130<sup>th</sup> Street /Meridian Avenue N intersection. (Cost estimate: \$1,980,000)
- G-1. Add curbs, gutters and sidewalks on both sides of 15<sup>th</sup> Avenue NE from NE 92<sup>nd</sup> Street to NE 117<sup>th</sup> Street. This project may require phasing due to its' high cost. Neighborhood-based funds have been allocated for a raised walkway for approximately four blocks (NE 92nd to 96th Street). In 2006 and prior to the execution of this project, SDOT and the community partners should decide upon the permanent design and construction technology to be utilized for the entire 15th Ave. NE pedestrian facility; and phasing and funding options to achieve maximum leverage. (Cost estimate: \$3,539,000)
- A-4. Signalize the I-5 northbound off ramp and 5<sup>th</sup> Avenue NE intersection and coordinate this signal with the 5<sup>th</sup> Avenue NE/NE 130<sup>th</sup> Street intersection signal and connect/coordinate all signals along NE 130<sup>th</sup> Street/ NE 125<sup>th</sup> Street corridor. (Cost estimate: \$669,000)
- G-3. Install a traffic signal after adopted warrants have been met and modify the intersection geometry at the 15<sup>th</sup> Avenue NE/NE 117<sup>th</sup> Street/ Pinehurst Way NE intersection. (Cost estimate: \$1,980,000)

# Long-Term Improvements

- G-2. Construct a roundabout at the Pinehurst Way NE/ NE 115<sup>th</sup> Street / 12<sup>th</sup> Avenue NE intersection. (Cost estimate: \$3,107,000)
- G-5. Reconstruct the Northgate Way and 15<sup>th</sup> Avenue NE intersection to provide north-south left turn pockets. (Cost estimate: \$1,980,000)
- C-3. Install a traffic signal after adopted warrants have been met at the N 115<sup>th</sup> Street/ Meridian Avenue N intersection. (Cost estimate: \$413,000)
- A-3. Add an eastbound left turn pocket at the 5<sup>th</sup> Avenue NE and NE 130<sup>th</sup> Street intersection. (Cost estimate: \$3,416,000)

- A-2. Add a westbound left turn pocket at the I-5 southbound on-ramp and NE 130<sup>th</sup> Street intersection. (Cost estimate: \$89,000)
- A-7. Upgrade the traffic existing signal at the NE 125<sup>th</sup> Street / 15<sup>th</sup> Avenue NE intersection to include poles/mast arms and detection. (Cost estimate: \$231,000)
- D-2. Install a traffic signal after adopted warrants have been met at the NE 92<sup>nd</sup> Street and 1<sup>st</sup> Avenue NE intersection. When traffic signal is installed, replace existing speed humps with humps that are consistent with the most current SDOT design and construction standards. (Cost estimate: \$495,000)



**Priority Project Ranking: Move People Safely and Efficiently** 

# **Near-Term Improvements**

- C-2. Add bike lanes and sidewalks on both sides of Meridian Avenue N from N 115<sup>th</sup> Street to N 122<sup>nd</sup> Street. This project may need to be phased due to its' high cost. (Cost estimate: \$1,275,000)
- F-8. Reconstruct the existing sidewalk on the east side of 1<sup>st</sup> Avenue from NE 97<sup>th</sup> Street to NE 92<sup>nd</sup> Street and provide a bicycle lane on the west side of 1<sup>st</sup> Avenue (by extending the shoulder by 4 feet) between NE 103<sup>rd</sup> Street and NE 92<sup>nd</sup> Street. (Cost estimate: \$486,000)
- I-2. Stripe bike lanes on 5<sup>th</sup> Avenue NE from NE 115<sup>th</sup> Street to NE 125<sup>th</sup> Street. (Cost estimate: \$129,000)
- C-4. Provide bicycle lanes on both sides of Meridian Avenue N from Northgate Way and N 100<sup>th</sup> Street. (Cost estimate: \$141,000)
- C-5. Provide bicycle lanes on both sides of College Way from N 100<sup>th</sup> Street to N 92<sup>nd</sup> Street by converting the curb lanes to bicycle lanes. Work with Metro to ensure that transit service standards for speed and reliability of service are maintained. (Cost estimate: \$96,000)
- J-4. Form a Transportation Management Association with major employers, businesses and property owners. Working with the City and Metro, the TMA would encourage its members to reduce SOV trips and more efficiently parking demand through joint use. (Cost estimate: not prepared)

# **Mid-Term Improvements**

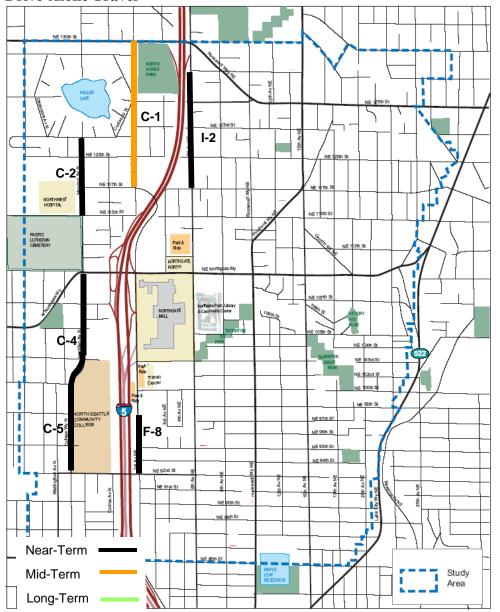
- C-1. Add bike lanes or widen shoulders to accommodate bike traffic on 1<sup>st</sup> Avenue N from N 117<sup>th</sup> Street to N 130<sup>th</sup> Street. (Cost estimate: \$999,000)
- J-2. Provide improved transit service with average of 15 minutes frequencies during off-peak hours from Northgate to the University District. This service improvement recommendation is consistent with the SDOT Urban Village Transit Network (UVTN) plan, prepared in collaboration with Metro. (Cost estimate: not prepared). Note: All recommended transit service improvements that involve UVTN corridors would be negotiated between the City and Metro as part of the ongoing collaboration on the Network.
- J-3. Improve transit service with average of 15 minutes frequencies during peak periods and 30 minutes frequencies during off peak period to other Urban Villages such as Bitter Lake, and Aurora-Licton Springs. This service improvement recommendation is consistent with the SDOT Urban Village Transit Network plan, prepared in collaboration with Metro. (Cost estimate: not prepared)

**Note**: All recommended transit service improvements that involve UVTN corridors would be negotiated between the City and Metro as part of their ongoing collaboration on maintaining high performance throughout the Network.

# Long-Term Improvements

J-1. Increase transit services from the neighborhoods to the Transit Center/ Link Light Rail Station by providing community feeder services. (Cost estimate: not prepared)

# **Priority Ranking of Recommended Improvements under the CTIP Goal: Reduce Drive-Alone Travel**



Note: Transit service improvement concepts, J-1, J-2, J-3 and J-4 are not shown.

## CTIP Goal: Support Housing and Economic Development

# Near-Term Improvements

- F-5. Construct a three-lane roadway on 3<sup>rd</sup> Avenue NE from NE 100<sup>th</sup> Street to NE 103<sup>rd</sup> Street. (Cost estimate: not prepared as project has already been programmed by SDOT and Metro for design and construction)
- F-3. Install a traffic signal at the NE 103<sup>rd</sup> Street / 3<sup>rd</sup> Avenue NE intersection. Provide urban design treatments for accommodating pedestrians. (Cost estimate: not prepared as this project has already been programmed by SDOT.)
- F-6. Add four-way stop control and, in future, install a traffic signal after adopted warrants have been met at the NE 100<sup>th</sup> Street / 3<sup>rd</sup> Avenue NE intersection. Provide marked crosswalks and urban design treatments for accommodating pedestrians. (Cost estimate: \$495,000 for traffic signal)
- E-6. Add westbound and eastbound double left turn lanes on Northgate Way at 5<sup>th</sup> Avenue by widening the south side of Northgate Way from approximately 8<sup>th</sup> Avenue to 3<sup>rd</sup> Avenue. Assign southbound curb lane to right turns only. Re-align the southbound through lane to eliminate the existing "offset" condition. Provide urban design treatment to enhance the pedestrian crossings at the Northgate Way/5<sup>th</sup> Avenue NE intersection. (Cost estimate: \$1,365,000 for land acquisition and construction only)
- E-4, E-5, Add a new access driveway to the 3<sup>rd</sup> Avenue alignment at the Northgate Way/3<sup>rd</sup> Avenue NE intersection and eliminate the existing semicircular Northgate Mall driveway with two intersections on Northgate Way. It may require widening of 3<sup>rd</sup> Avenue north of Northgate Way to align the approach lane with the Northgate Mall side. Provide crosswalks on all legs at the Northgate Way/3<sup>rd</sup> Avenue NE intersection. Place barriers at the edge of the north sidewalk or in the median between 3<sup>rd</sup> Avenue NE and 5<sup>th</sup> Avenue NE to discourage mid-block street crossings by pedestrians. (Cost estimate: \$1,980,000)
- C-7. Allow westbound left turns from Northgate Way to southbound Corliss Avenue at the SB I-5 Off Ramp/Corliss Ave/ Northgate Way intersection. Extend the westbound left turn lane on Northgate Way under the I-5 Overpass by placing the new sidewalks behind the support columns. (Cost estimate for lane extension only: \$132,000)
- C-9. Provide a roundabout at the SB I-5 On Ramp/Corliss Avenue N/ N 107<sup>th</sup> Street intersection. (Cost estimate: \$2,333,000)

**Note:** Roundabout design would accommodate vehicles that typically use the intersection including large trucks and fire trucks

C-10. Provide a roundabout at the Meridian Ave N/ N  $107^{th}$  Street intersection. (Cost estimate: \$2,325,000)

**Note:** Roundabout design would accommodate vehicles that typically use the intersection including buses and fire trucks.

- C-11. Provide curbs, gutters and sidewalks on N 107<sup>th</sup> Street from Meridian Avenue N to Corliss Avenue N/SB I-5 On Ramp. (Cost estimate: \$222,000)
- J-5. Re-classify Corliss Avenue from Northgate Way to N 107<sup>th</sup> Street and N 107<sup>th</sup> Street from Corliss Avenue N to Meridian Avenue N as collector arterials. (Cost estimate: not prepared)
- E-1. Coordinate all signals and optimize signal operation for peak, non-peak weekdays and weekend days based on vehicle volumes on Northgate Way. (Cost estimate: \$1,040,000)
- E-8. Replace the existing pedestrian signal with a full traffic signal and allow left turns on all approaches at the Northgate Way/8<sup>th</sup> Avenue NE intersection. Utilize urban design treatments consistent with the theme established at other key intersections within the Urban Center (e.g. Northgate Way/5th NE). (Cost estimate: \$495,000)

**Note**: See also CTIP Goal of "Protect Neighborhoods" (project B-3).

E-3. Monitor safety performance of westbound traffic on Northgate Way approaching 1<sup>st</sup> Avenue intersection to determine the future channelization improvements. (Cost estimate: not prepared as this is an ongoing SDOT function)

#### Mid-Term Improvements

- F-2. Add a westbound right turn lane and implement the intersection improvement concept prepared by King County Metro and SDOT at the NE 103<sup>rd</sup> Street/1<sup>st</sup> Avenue NE intersection. (Cost estimate: \$1,980,000)
- F-4. Allow eastbound left turns from the existing curb lane at the NE  $103^{rd}$  Street /  $5^{th}$  Avenue NE intersection. (Cost estimate: \$83,000)
- I-1. Extend NB right turn lane on 5<sup>th</sup> Avenue NE south of Northgate Way to NE 106<sup>th</sup> Street. (Cost estimate: \$238,000)

#### Long-Term Improvements

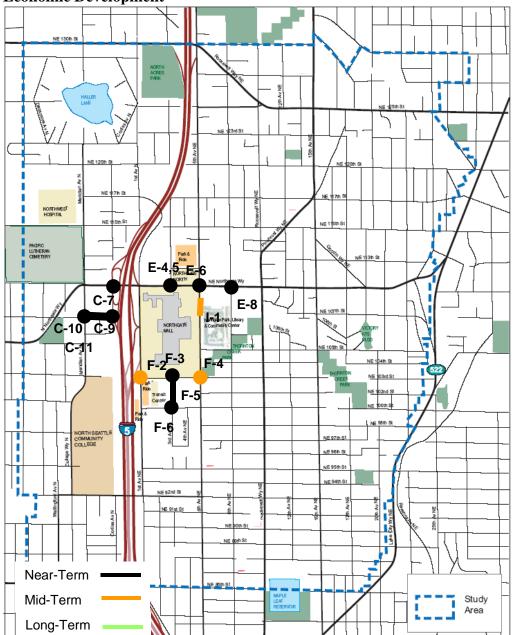
E-2. Modify westbound approach – curb lane: right and I-5 on-ramp, 2nd lane: I-5 on-ramp and through, and 3rd lane: through only at the Northgate  $Way/1^{st}$  Avenue

NE/ I-5 On Ramp intersection. Widen the on-ramp to have two lanes on Northbound I-5 On Ramp from Northgate Way. (Cost estimate: \$833,000)

#### Not Recommended

C-6. Add double left turn lanes on westbound Northgate Way at the intersection with Meridian Avenue N. This improvement conflicts with the location of an existing four-story building at the southeast corner of the intersection. To implement this project would require purchase of this building. This project received a low evaluation score due to high cost particularly in relation to the greater safety benefit and the lower cost of the alternative approach (i.e. the Corliss Avenue N "bypass" concept described in C-9, C-10 and C-11). (Cost estimate: \$8,572,000)

# Priority Ranking of Recommended Improvements under the CTIP Goal: Support Economic Development



Note: Transportation improvement concept E-1 is not shown.

## CTIP Goal: Protect Neighborhoods

## Near-Term Improvements

- B-5. Add a raised walkway on the north side of N 117<sup>th</sup> Street from 1<sup>st</sup> Avenue N to Meridian Ave N and install speed "cushion" for traffic calming. Consider phased implementation of this project. Cost estimate: \$125,000)
- B-1. Provide a raised walkway on one side of NE 115<sup>th</sup> Street from 5<sup>th</sup> Avenue NE to Lake City Way. Restrict on-street parking to one side. Consider phased implementation of this project. (Cost estimate: \$1,150,000)
- B-3. Provide a walkway on one side of 8<sup>th</sup> Avenue NE from Northgate Way to NE 92<sup>nd</sup> Street. Install appropriate traffic calming devices to discourage excessive traffic speeds. Consider phased implementation of this project. (Cost estimate: \$389,000)
- B-2. Install mid-block pedestrian crossing improvements, consistent with SDOT guidelines and practices, such as curb extensions, signs and markings, in-pavement lighting and urban design features such as textured and colored surface treatments on 8<sup>th</sup> Avenue NE between Northgate Way and NE 115<sup>th</sup> Street. This crossing will connect senior housing developments on the west side of 8<sup>th</sup> with a post office on the east side. (Cost estimate: \$83,000)
- B-4. Provide a raised walkway on one side of NE 98<sup>th</sup> Street from 15<sup>th</sup> Avenue NE to Lake City Way. Allow on-street parking. Integrate traffic control devices with the sidewalk improvements. Consider phased implementation of this project. (Cost estimate: \$338,000)

# **Priority Ranking of Recommended Improvements under the CTIP Goal: Protect Neighborhoods**

